

“Skilled Indians in Europe: Knowledge transfer and social impact”

Dr. Gabriela Tejada
Cooperation and Development Center
Ecole Polytechnique Fédérale de Lausanne
gabriela.tejada@epfl.ch

(Pre-print version of the book chapter: “*Skilled Indians in Europe: Knowledge transfer and social impact*”, Tejada, G., “*Migration and social remittances in a global Europe*”; Nowicka, M. & Serbedzija, V.; *Palgrave Series Europe in a Global Context*: London; 2016; pp. 281-301.)

Introduction

In recent times, the recognition of skilled migrants as agents of transformation and bridges for the circulation of knowledge and ideas between countries has gained importance within the migration and development nexus. While the latest research has been mostly aimed at understanding the magnitude, characteristics and impacts of skilled migration, policy options look for ways of encouraging potential benefits. Recent studies show the channels of engagement that foreign-based skilled professionals use to promote different types of connections and transfer competences that benefit their home countries.

This *brain-gain* is of particular interest in India due to the large numbers of Indian skilled professionals and students in Western countries. Although the positive effects of skilled migration that benefit India by promoting economic growth have often been addressed, less is known about the actual and potential social impact in terms of improving people’s quality of life. It is therefore necessary to understand the ‘development contributions’ as a transformation of social structures in a way that the individual’s agency and social capital are expanded. The chapter presents an evidence-based analysis aimed at understanding the individual and structural-level factors that influence the interest of skilled Indian migrants, and their actual interventions in home country development. It discusses social remittances, in the form of transfer of knowledge, skills, ideas and behaviours, deployed by Indian skilled migrants both by physical return and transnational diaspora actions. Social remittances are approached by observing migrants’ perceptions and expectations, which are decisive factors in their behaviours (De Jong 2000, Cassarino 2004), and the determinants that help to bring their actions to the neediest sectors of the population are examined.

The study is founded on recent research into Indian skilled migration that draws on qualitative and quantitative methods consisting of in-depth interviews and a unique dataset of Indian skilled professionals and students either living in Europe, or who have returned to India¹. The chapter argues that the knowledge and talents acquired by skilled migrants abroad can help to expand the agency of individuals, and accordingly, give them the potential to contribute to social transformation. It shows how significant changes are needed in India’s workplace culture and structure to enable the transfer of knowledge and expertise from skilled migrants and translate it into development. It is concluded that the socioeconomic environment together with the social culture in the country of origin largely condition the extent to which expertise and talent from skilled migrants are effectively utilised. This shows the importance of the consideration of the cultural aspects enabling or hindering knowledge and skills circulation and deployment in the current discussion on remittances, which keeps attracting scholarly attention (Levitt and Lamba-Nieves 2011, De Haas 2011, Carling 2014).

Recent evolution of the views on skilled migration and its effects

When speaking about skilled migration, it is difficult to leave aside concerns related to the effects for developing countries, in particular the loss of human capital. The studies of reference from the 1960s up to the 1980s emphasised the loss of the public investment in higher education resulting from the exodus of skilled professionals and scientists who sought greener pastures in Europe or North America (Johnson 1967). Bhagwati and Wilson (1989) viewed brain drain as a negative externality imposed on those remaining in the country of origin, and a zero-sum game in which rich countries were the winners and poor ones the losers. The arrival of new growth theories brought a renewed interest in the effects of skilled migration, highlighting human capital as a

¹ The project was implemented collaboratively between the Cooperation and Development Center of the École Polytechnique Fédérale de Lausanne (CODEV - EPFL), the Institute of Development Studies Kolkata (IDSK), the Jawaharlal Nehru University (JNU), and the International Labour Office (ILO), with financial support by the Swiss Network for International Studies (SNIS) in Switzerland.

source of growth (Lucas 1988), and seeing a significant economic and social loss when the more highly educated contribute to other countries rather than their own.

The option of home-country return, as practically the only alternative to generating benefits, was challenged by new ideas that arose in the 1990s, which viewed migrants as having multiple affiliations and simultaneous connections to different places. Skilled migration came to be seen as an opportunity that could benefit the countries of origin if managed correctly. Since then, skilled migrants have been seen as "accessible mediators of social capital with the potential to be mobilized to benefit the country of origin" (Luchilo 2011: 14). With the change of the millennium, the academic interest and the political debate, showed renewed interest in the links between migration and development, and the focus shifted to the real and potential benefits that migrants make to countries of origin through transfers of resources and knowledge. However, special emphasis was placed on the macroeconomic effects of financial remittances, and the economic growth generated in specific sectors such as ICTs and high-tech (Meyer 2010).

The mobility of skilled scientists and professionals has traditionally been spurred on by the universal nature of science, scientific nomadism and professional opportunities outside the country of origin. This has now changed as a result of global transformations that encourage the mobility of skilled personnel, such as for example the world competition for talent and the internationalisation of higher education. Technological progress has also led to information and communication systems and transport networks that connect people and facilitate mobility (Castells 1996). As a result, the flows of human capital, ideas and knowledge have become more complex and multidirectional, and their effects have diversified. Accordingly, and as Castles and Miller (2009) argue, skilled migration should be seen as a significant component of a complex and multidimensional phenomenon that is part of the current processes of social transformation, and to which the circulation of knowledge and other forms of social remittances are embedded.

This is the context of the transformation from which a new approach to skilled migration has emerged over the last two or so decades, which has seen the focus shift from economic growth towards a conceptualisation of skilled migrants as knowledge communities in the form of scientific diasporas (Meyer 2001; Barré et al 2003; Tejada 2012), becoming relevant actors as creators of bridges between the source and destination countries, making multiple transnational interventions (Vertovec 2004; Faist 2010) and establishing connectivity networks that benefit their countries of origin (Kuznetsov 2006). Although the importance of financial remittances continues to be recognised among the links between migration and development, the effects in the form of social remittances or through return migration have been the focus of attention of more recent studies of skilled migration.

Characteristics of Indian skilled migration

India has been an important source country of skilled migrants for many years. Indians abroad constitute one of the largest diaspora groups, estimated to be about 25 million in 2012 (MOIA 2012), and account for the second highest annual flow of international migration after China (Khadria 2009). Emigration by skilled Indians to industrialized countries has risen over the past two decades, and the industrialized countries of continental Europe have emerged as new destinations as a result of their conversion into knowledge-based economies, and in response to their participation in the global race for foreign talent (Buga and Meyer 2012). India is the leading source of skilled migrants to OECD countries from developing countries (2 million Indians (UN-UNDESA and OECD 2013).

A significant component of recent Indian skilled migration is the growth in the flows of Indian students. India now ranks second after China as the main source country for international students, accounting for 6.5% of all foreign students enrolled in tertiary education in the OECD countries (OECD 2013). Several factors influence this increase, such as the internationalization of higher education and competition among educational institutions for foreign talent (Tremblay 2005), the prevalent view in India that a foreign degree ensures better employment prospects (Mukherjee and Chanda 2012), and young Indians' own impetus to pursue higher education overseas as part of their career paths (Hercog and Van de Laar 2013).

A further leading factor behind the increasing number of Indian international students is related to policies in new European destination countries, which are increasingly tending to recompense degrees acquired in their country by allowing students to stay on after their studies and giving them favourable treatment when applying for residence permits (Tejada et al. 2014b). As recent research shows, institutional settings in host countries not only influence skilled migrants' choice of where they move to, but it also impacts how they facilitate their exchange of knowledge with the home country and influence their further mobility plans, including their possible return (CODEV et al. 2013; Hercog and Siddiqui 2014; Tejada et al. 2014a).

The significant presence of Indian skilled professionals and students in Western countries "who are now looked upon as angels and (who) offer the perfected image of transnational global citizens" (Khadria 2014: 31), depicts them as being capable of

bringing business leads and technology, as well as knowledge and skills through reverse flows of expertise back to India. India's gains have resulted in a positive view of the influence that skilled migrants can have on economic progress. However, the social effects in terms of the expansion of individuals' social capital have not attracted sufficient attention so far in research into Indian skilled migration.

Research on skilled Indians in Europe and returnees in India

This study draws on recent research into Indian skilled migrants in Europe and their engagements in knowledge circulation with India, completed as part of an international project aimed at identifying the factors that influence the propensity of skilled Indians to deploy their foreign-acquired knowledge and skills in the Indian context, through both physical return and transnational diaspora actions.

Empirical data were collected between 2011 and 2013 via two complementary survey questionnaires conducted concurrently in India and Europe. In India, skilled Indian returnees were interviewed in six major cities: the Delhi-National Capital region, Kolkata, Bangalore, Hyderabad, Mumbai and Pune. A skilled Indian returnee was considered to mean a past or present Non-Resident Indian (NRI) or Person of Indian Origin (PIO) who had stayed abroad for more than six months before returning to India, who was working in India and who held at least a Bachelor's degree. In Europe, first generation Indian skilled professionals and students living in four continental European countries (France, Germany, the Netherlands and Switzerland) were approached. The sample comprised 835 Indian students and skilled professionals in the selected European destinations, and 527 returnees in India; it was complemented by information collected through 30 qualitative in-depth interviews with key experts and skilled migrants in India and Europe.

Factors influencing development aspirations

This study is based on the expectations and perceptions of Indian skilled migrants related to possible positive effects on home country development resulting from their overseas experiences. It is not unusual to address the subject of migrants' knowledge and skills transfer from a perceptions and expectations standpoint, insofar as these are decisive factors in migrants' factual behaviour (De Jong 2000). Migrants' perceptions are founded on their personal subjective appraisal of the effects of their influence (Cassarino 2004). Impact on development is assessed in terms of the migrants' own subjective opinion of their contributions from abroad. How migrants experience the process of adjusting to the local context and the extent to which they feel capable of deploying the accumulated knowledge and expertise they have gained abroad to the society around them upon their return to India are also observed.

It would be challenging not to concur that any knowledge or experience accumulated could only be beneficial to India's development. Yet, this does not diminish the difficulty of objectively assessing the actual effects migrants have on the home country. While the great majority of the skilled Indians in Europe participating in the study agreed that their current activity could have an impact on the socioeconomic development of India, this thought was not shared by all. Following our desire to take a closer look at the specific factors shaping the interest of Europe-based skilled migrants in development, we observed two types of influential factors: individual-level and structural factors. In terms of the individual-level factors, we found that the activity profile of skilled Indians is a relevant determinant, as those involved in research, training and education have higher development aspirations than professionals in paid employment. This may be a consequence of Indian researchers and scientists working in academia generally being in a position that allows them to positively influence individuals through advice or teaching or the application of innovative research, which they believe, can expand people's opportunities in the Indian local context. Similarly, the younger age, stronger motivation and higher optimism of students may influence their self-visualisation as instruments of change. This may also be related to their emotional ties to the home country and their return plans, which encourage them to remain connected to the home country in preparation for their next move. As research shows, by bearing in mind their assessment of what their future plan may look like, migrants tend to invest their time and resources in activities related to such a priority plan (Hercog and Siddiqui 2014). Cassarino (2004) argues that migrants' preparation for their return to the home country determines their propensity to influence social change there. That skilled Indians link their development aspirations to their return plans and believe that Indian society can benefit from their accrued experience is one important finding of our study. Disadvantaged affiliations related to gender, caste, religion and the medium of instruction in elementary education (vernacular versus English) is another individual-level factor that positively affects skilled migrants' concerns about Indian development. A recent in-depth examination of individual-level factors based on regression analysis came up with this finding (Siddiqui and Tejada 2014). For example, we revealed that Indians from minority religious groups show a greater interest in home country

development. This can be explained as a consequence of the appraisal they make during their experience of social inequality in India and the freedom and rights enjoyed in Europe, causing them to feel a sense of responsibility towards the less fortunate members of their own social groups. The active involvement of disadvantaged social groups in development may be seen as an effort to both counterbalance and react to the home state's failure to deliver greater equality. The issue of the impact of migration on gender and class stratification has received considerable attention in academic research. The issue as to whether migration leads to a rise or fall in the status of migrants in general, and women in particular, as a result of changes in their position in society is not conclusive, as studies show that other factors beyond migrants' individual attributes such as their cultural background and skills level, as well as the context of the countries concerned also have an impact (Iredale et al 2003; Levitt and Lamba-Nieves 2011).

With regard to structural level factors, we found that links to India in the form of professional or philanthropic ties, as well as temporary visits, seem to influence the development impetus of skilled migrants. Furthermore, the Indians' region of origin affects their development aspirations, as we observed that Indians' from rural areas or states with lower socioeconomic development were more likely to be optimistic about their activity impacting India's development than those from urban areas and better-off states (Siddiqui and Tejada 2014). Those migrants who did not see themselves as instruments of change - arguing they could not imagine how their current activity could generate benefits to India - gave two main reasons for this. On the one hand, they were reluctant to commit to development actions towards their home country because of diverse disappointing structural factors such as the political situation, lengthy bureaucratic processes or limited infrastructure to host ambitious research projects. On the other hand, they thought their activities had very little to do with Indian social realities, and therefore, they did not see how they could provide any value for deployment in India. As argued by Collier (2013), while migrants' perspectives on norms, institutions and values can change as a consequence of sociocultural integration in a social model abroad, their development ambitions may be deterred by mechanisms of rejection of the norms they attempt to transfer to the local context of their home country (Paasche in this volume).

We also examined returnees' interest in development and observed that the majority thought about participating in action by applying what they had learnt abroad in various ways, such as business and job creation or research and academic training. They believed their overseas experiences and professional skills might generate positive outcomes for the workplace and society at large. However, we also observed that all the returnees did not share this thought, as not all see themselves as potential agents of positive change.

Being an active part of an organisation was one of the three main factors influencing the development interest of returnees. Affiliation to a religious, cultural, sporting or political organisation may be considered an indicator of an individual's leadership role in their immediate social or professional circle and their commitment to contribute to society. The activity profile was a second influential factor we observed, with returnees working in research and academia showing a greater interest to partake in the development process of India than those employed in the private corporate sector. This may be a result of the former perceiving that they could contribute to expanding people's opportunities through their professional and personal activities as advisors or teachers, or through the application of innovative research, whilst those working in the corporate sector may feel that their companies' profit is not directly linked to the social development of the community. Disadvantaged identities is a third influential factor. As among skilled Indians based in Europe, we observed that returnees with at least one disadvantaged identity (women, dalits, those from a religious minority, those schooled in a vernacular language, and those from a rural background) are more likely to contribute to India's development than those who do not share those identities. The motivation to work for greater social equality of an individual who has experienced underdevelopment and marginalisation at an earlier stage of his/her life after experiencing a higher level of freedom and rights in Europe, may be the reason behind the individual's degree of commitment.

Transnational practices and channels of engagement

Transnational engagement in the form of activities that span borders is a phenomenon through which individuals react to long-distance social responsibilities and reconstruct a feeling of belonging to their places of origin. The transnational social fields where transnational practices take place and where migrants engage, also frequently span the world development divide (Levitt and Glick-Schiller 2004; Erdal 2015). Indeed, the transnational nature of migration and its related flows of people, resources and social remittances also affect the lives of those who have never moved (Levitt 1999).

There are several ways in which Indian skilled migrants can contribute to home country development, either from abroad or after return. We focus on two main channels of engagement to capture migrants' commitment to development as a result of knowledge transfer: social remittances and physical return. Social remittances occur in the shape of information, ideas, behaviours and

social capital deployed in the local context by transnational practices from a distance (Levitt 1999, Levitt and Lamba-Nieves 2011; De Haas 2011). Social capital (Bourdieu 1986) refers to individual's obligations and expectations in the form of resources or capital invested in someone for future use.

Transnational ties with India in the form of the social remittances of skilled Indians living in Europe follow several patterns. One of these is knowledge circulation, which has the potential to benefit home country communities and reinforce the transnational nature of migration. A variety of knowledge-circulation practices takes place through migrants' scientific and academic activities; for instance, when they address questions that are significant for India's development, or when they jointly conduct research with peers based in India. They see scientific cooperation as a leverage benefitting Indian researchers, which provides improved access to infrastructure and facilitates access to networks by creating employment prospects and enhancing education. As one Indian researcher in Switzerland said: *"I can influence India by developing research collaborations with Indian scientists, which can help in technology transfer and knowledge sharing. The best way to help is by working with people there"*. A Netherlands-based researcher said: *"I am currently researching renewable energy development in India. My research here focuses on development issues in India"*. A student in France said: *"Since I am pursuing my MBA, I can make a difference to the economy of India by generating employment and business flows and improving the quality of life of the masses"*.

Return migration arose as a channel of engagement of skilled Indian migrants. Our study observed both return intentions from skilled Indians in Europe as well as their actual return to India. Plans to return to the home country were seen by skilled Indians in Europe as a clear tool for influencing home country development. Their specific plans to accomplish their migration project back in India arose as an incentive for the positive feelings about their aspirations of a real future engagement. This was mostly seen in the testimonies of students and young researchers who felt committed to helping to build capacities and improving research and education there. One post-doctoral researcher in France said: *"I want to go back to India after my Postdoc and create a productive mathematics research group there."* In a similar vein, a researcher based in Germany said: *"I would like to contribute to my country by going back and taking up a teaching position at a public institution"*. We observed that the return plans of skilled Indians are a response to a positive assessment of the economic and professional opportunities that India has to offer, as well as a response to family ties. As in the findings of Carling et al (2016) we could see that skilled Indians rely on families and friends, social media and networks for information about the setting in the home country, which influences their return intentions (Carling et al. 2016). Migrants' intentions are mainly based in the career and business opportunities they see India has to offer, and families and professional networks will enable their possible move (Biswas 2014).

Return migration is perceived as an influential tool for development in India. Studies have shown the meaningful role that skilled Indian professionals play in the local setting once they return, stressing the transfer of technical skills and managerial know-how deployed through their professional and entrepreneurial actions (Saxenian, 2005, 2006; CODEV et al. 2013). Whether and how returnees are able to generate positive outcomes by introducing their accumulated knowledge and skills, are issues addressed in migration research. The main determinants of successful deployment are related to migrants' individual attributes and migration patterns, as well as socioeconomic and structural conditions in the home country (Siddiqui and Tejada 2014, Jonkers 2008; Iredale et al 2003). Additional influential factors include migrant sector and the type of professional activity, and the match between their qualifications and labour-market requirements in the home country (Thomas-Hope 1999). The particular location to which migrants return is also influential. Skilled Indian returnees' location preferences are guided by the better infrastructure and employment prospects in urban hubs, which offer higher opportunities for skills transfer (Kumar et al. 2014). An additional factor determining how far returnees are able to exert a leadership role in bringing about social change is the receptiveness of the community and work colleagues to new ideas.

When skilled migrants return to India, they arrive with the intention of using their accumulated social capital to positively influence the country. Most returnees from our study felt they effectively use their foreign-earned experiences and knowledge in their current job. However, they have also faced hindrances, such as bureaucracy, work culture differences and a lack of adequate infrastructure, which have all affected their efficiency at work and the possibility of deploying their resources in a more streamlined fashion. This implies organisations would get more out of skilled returnees if these issues could be resolved.

Some return experiences are not totally satisfactory as the returnees find it hard to adapt to the local system, the structural context and the social culture. A scientist who returned to Delhi after eight years holding various research positions abroad argued the advantages and challenges. *"Positive things are that I have a permanent position, something everybody wants as career goal. It pays well. I have full medical insurance and so do my parents. I have freedom to develop my own laboratory although not at the pace I would like"*. About the major challenges faced, he mentioned: *"Coming back to India and trying to settle down for a productive career does feel very inspiring, but in reality it can be heart-breaking and painful. Part of the problem is people's mentality as they think those coming back have been laid off outside. They cannot seem to understand the real reasons behind us wanting to have a good career here; they do not see us as an asset to India"*. One researcher who returned

from Germany said: *“After two years back in India, I am still not able to fully use my skills and this very unsatisfying”*. A scientist who spent eight years abroad said: *“It took me almost two years to realise that in order to be able to change the system, I had to understand it, and fit into it. Now, I feel I am able to use what I learnt outside to improve my life and work here. But I run the risk of becoming institutionalised and completely forgetting what I learnt outside”*.

By observing returnees' experiences, the study revealed that, while India offers opportunities that pull its skilled migrants back by offering interesting job positions and prospects, there is a need to ensure a favourable environment in the structure and work culture of organisations, as well as within local peoples' attitude. As Dustman et al. (2011) pointed out, the possibility of gaining from return migration increases when there are adequate opportunities to apply obtained skills to the home country context, and when accumulated skills are appropriately recognised in the local context.

Impact on individuals' position in society and their influence on people

We are interested in discerning the level of influence that the knowledge and skills acquired by the returning skilled Indians during their migratory experiences has in term of strengthening their own social capital and that of the people around them. This facilitates a better understanding of the impact that returning skilled migrants have on development, which is understood here as the transformation of social structures in a manner in which individual agency is expanded upon. From this perspective, the possibility that returning migrants can successfully involve themselves in social change depends on several factors, one of which is the level of acceptance among members of their closest professional and family circles.

In order to be able to understand this, we analyse the responses to the following questions: “How has your position in society been influenced by your experience abroad?”; and “In your opinion, how much influence do your ideas and your opinion have on the people around you (family members, relatives, colleagues, friends)?”.² Regarding the first question, and based on their own perceptions, skilled Indians responded that the accumulation of knowledge and skills obtained abroad allowed them to generate changes to their position in society³. The majority believe that their migratory experience has had a positive influence in terms of strengthening their social position, and they perceive greater recognition from their colleagues, family members and friends. Taking a closer look at the individual profiles, we observe that those with a better educational level and members of organisations of different types tend to perceive a more palpable positive change in their social position. Being part of an organisation is an indicator of a person's social commitment and can be understood as evidence of the role of the individual agency of returning migrants in their closest social and professional circles. With regard to the influence of an affiliation to disadvantaged identities in the perception of change to their social position, we observed that women are more likely to experience a positive change than their male counterparts. We can say that individuals who experience a positive change in their social position, such as women and the more skilled, are in a good situation to achieve their objective of contributing to development, and their opinions can play a significant role in the joint decisions taken by the groups they form part of.

We complement our results with the replies to the second question, and which highlights our interest to know more about the influence that returning migrants themselves believe that they have on their closest social and professional environments as a result of the leadership role that they may have acquired when introducing new ideas and attitudes in their workplace or in society⁴. The capacity of returning migrants to influence the people around them is important for both the transfer of knowledge and skills acquired during their migratory experiences, and for strengthening the individual agency of people around them. If people believe that they greatly influence those around them, we can understand that they assume that their social and interpersonal exchanges have been effective in terms of producing the desired results in other members of society. A high level of influence on people around them can be an indicator of the successful transfer of knowledge and skills of returnees. This means that migrants can in fact be agents who transform their societies of origin and contribute to a restructuring of social inequalities through the practice of social remitting (Levitt and Lamba Nives 2011). In a similar way to what we observe in the determinants that led to the perception of a greater personal transformation, here membership of an organisation, educational level and gender also seems to affect the perceptions of the returning skilled migrants, and members of organisations, women and more highly educated individuals are those most likely to perceive a greater influence on people around them.

² We applied logistic regression to our primary data base survey on skilled Indians in Europe and returnees in India to discern the extent to which returnees actually perceive themselves as agents of development at both a collective and an interpersonal level. The findings presented hereafter are based on the results of that analysis (Siddiqui and Tejada 2014).

³ Responses were recorded on a 5-point Likert scale in the following categories: very negatively, negatively, not much change, positively, and very positively.

⁴ The returnee's own perception of their influence on people around them was recorded on a 3-point Likert scale: no influence, a little influence, or a lot of influence.

Conclusions and implications

Moving beyond recognition of migrants' potential to generate benefits for their countries of origin as a result of their migratory experiences, the current debate on the links between migration and development focusses on political strategies that can reduce the negative effects and promote gains for socio-economic development, offering greater opportunities for the majority of people. Skilled migrants play an important role in that they have the potential to transfer knowledge, skills and other social capital acquired during their migratory experiences to the local context of the country of origin, thus contributing to its progress.

The case of India is paradigmatic thanks to the significant presence of Indian researchers, skilled professionals and students in Western countries. The internationalisation of both higher education and the professions allows skilled personnel to become more mobile and flexible when choosing their destinations. Furthermore, researchers and students in particular are exposed to strong social expectations of international experience and consequent mobility. In the international competition for talent of recent years, some countries in Western Europe have reduced the advantage of traditional destinations for skilled migrants from India, such as North America and the United Kingdom. This is partly due to changes in migratory policies that have been relaxed to compensate for human capital shortages in specific economic sectors and to improve their level of competitiveness.

The case of India shows how skilled professionals and students can transfer their knowledge and skills, and thus compensate for the exit of human capital, in both the country of destination through transnational actions in the form of social remittances, and once they have physically returned to the country of origin. They do this through the implementation of academic and research activities involving local people, focusing their research on topics relevant for India, teaching in public institutions and generating employment. The evidence of our study shows that these transfers can contribute to expanding the agency of individuals, at both collective and individual level, and contributing to social transformations in the country of origin. In this manner, the contributions of skilled migrants are seen as a transformation of the social structures in that individual agency and social capital are expanded. However, we must bear in mind the contextual factors that affect the effective deployment of migrants' resources, and as we have seen, major changes are needed in the work culture and structure to make sure the transfer of skilled migrants' knowledge and expertise can generate changes within the local context of India. There is a need to promote an adequate receptive attitude in society and the work environment. It is also necessary to strengthen institutional policies supporting scientific diasporas and returning migrants so as to involve them in actions that benefit social development.

Migrants from disadvantaged identities show a greater commitment to home country development, as we saw in the case of women, and Indians from religious minorities or scheduled castes. Knowledge transfer by these groups would affect development among the neediest communities in a more straightforward manner, as they are closely associated with disadvantaged social groups in India. This shows that social remittances, which are often sent across contexts of disparity, based on migrants' commitments and priorities can transform receiving communities. This indicates the importance of having equal-opportunity policies for returnees in India, and of having similar admission policies in the destination countries for skilled professionals and students, suited to Indian social realities.

Lastly, if there should be a desire to bring this study on to a further stage, the research would benefit by taking it in two directions. Firstly, to look more closely at sociological and anthropological methods, social and cultural elements, the change in power relations and the impact of skilled migration on family structures, and the rigidity of castes in India. Secondly, to study the perspectives that the influenced actors – both the closest circles (family, colleagues and employers) and society at large – have of the effects skilled migrants have had on them.

Acknowledgements

I would like to thank all my colleagues from the following institutions who have contributed to the research project: "Migration, scientific diasporas and development: impact of skilled return migration on development in India": CODEV-EPFL, ILO, JNU and IDSK), as well as the Swiss Network for International Studies (SNIS) for funding this study. I also thank all the respondents in India and Europe who have given their valuable time and information without which this study would not have been possible.

References

Bhagwati, J. and Wilson, J.D. (1989) *Income taxation and international mobility* (Cambridge: MIT Press).

Barré, R., Hernández, V., Meyer, J-B. and Vinck, D. (2003) *Diasporas scientifiques. Comment les pays en développement peuvent-ils tirer parti de leurs chercheurs et de leurs ingénieurs expatriés?* (Paris: IRD).

- Biswas, R. (2014) 'Reverse migrant entrepreneurs in India: motivations, trajectories and realities' in Tejada, G. Bhattacharya, U., Khadria, B., and Kuptsch, Ch. (eds.) *Indian skilled migration and development: to Europe and back* (New Delhi: Springer).
- Bourdieu, P. (1986) 'The forms of social capital', in Richardson, J. G. (ed.), *Handbook of theory and research for the sociology of education* (New York: Greenwood Press).
- Buga, N. and Meyer, J-B. (2012) 'Indian human resources mobility: brain drain versus brain gain' CARIM-India Research Report, (RSCAE/EUI: San Domenico di Fiesole).
- Carling, J. et al. (2016) *Possibilities and realities of return migration*, (Oslo: PRIO)
- Carling, J. (2014) 'Scripting remittances: Making sense of money transfers in transnational relationships', *International Migration Review* 48(1), 218-262
- Cassarino, J.-P. (2004) 'Theorising return migration: the conceptual approach to return migrants revisited', *International Journal on Multicultural Societies* 6(2), 253-279.
- Castells, M. (1996) *The rise of the network society. The information age: economy, society and culture* Vol. 1 (West Sussex: Wiley-Blackwell).
- Castles, S. and Miller, M.J. (2009) *The age of migration* (Palgrave-Macmillan: Hampshire).
- CODEV-EPFL, IDSK, JNU and ILO (2013) *Migration, scientific diasporas and development: Impact of skilled return migration on development in India* (Lausanne: CODEV-EPFL).
- Collier, P (2013). *Exodus: How migration is changing our world* (New York: Oxford University Press).
- De Haas, H. (2011) *The determinants of international migration. Conceptualising policy, origin and destination effects*. WP 32, (Oxford : IMI Working Papers).
- De Jong, G. (2000) 'Expectations, gender and norms in migration decision-making', *Population Studies*, 54(3), 307-319.
- Dustmann, C., Itzhak, F. and Weiss, Y. (2011) 'Return migration, human capital accumulation and the brain drain', *Journal of Development Economics*, 95(1), 58-67.
- Erdal M. (2015) 'The diaspora meets the development industry. Engaging Norwegian-Pakistanis in development back home' in Rahman M. and Tai Yong, T. (eds.) *International migration and development in South Asia* (London and New York: Routledge).
- Faist, T. (2010) 'Diaspora and transnationalism: what kind of dance partners?' in Bauböck, R. and Faist, T. (eds.) *Diaspora and transnationalism. Concepts, theories and methods* (Amsterdam: AUP).
- Hercog, M. and Siddiqui, Z. (2014) 'Experiences in the host countries and return plans: the case study of highly-skilled Indians in Europe' in Tejada, G., Bhattacharya, U., Khadria, B. and Kuptsch, Ch. (eds.) *Indian skilled migration and development: to Europe and back* (New Delhi: Springer).
- Hercog, M. and Van de Laar, M. (2013) 'What's the best place for me? Location-choice for S&E students in India', MERIT Working Paper 066 (Maastricht: UNU-MERIT).
- Iredale, R., Guo, F. and Rozario, S. (2003) *Return migration in the Asia Pacific* (Northampton: Edward Elgar).
- Johnson, H. (1967) 'Some economic aspects of brain drain', *Pakistan Development Review* 3, 379-411.
- Jonkers, K. (2008) 'A comparative study of return migration policies targeting the highly skilled in China, India, Mexico and Argentina', MIREM Analytical Report (RSCAS/EUI: San Domenico di Fiesole).
- Khadria, B. (2009) *Indian migration report 2009. Past, present and the future outlook* (New Delhi: IMDS-JNU).
- Khadria, B. (2014) 'The dichotomy of the skilled and unskilled among non-resident Indians and persons of Indian origin: bane or boon for development in India?' in Tejada, G., Bhattacharya, U., Khadria, B. and Kuptsch, Ch. (eds.) *Indian skilled migration and development: to Europe and back* (New Delhi: Springer).

- King, R. and Findlay, A. (2012) 'Student migration' in Martinello, M. and Rath, J. (eds.) *An introduction to international migration studies. European perspectives* (Amsterdam, AUP).
- Kumar, P., Bhattacharya, U. and Nayek, J. (2014) 'Return migration and development: evidence from India's skilled professionals' in Tejada, G., Bhattacharya, U., Khadria, B. and Kuptsch, Ch. (eds.) *Indian skilled migration and development: to Europe and back* (New Delhi: Springer).
- Kuptsch, C. (2006) 'Students and talent flow, the case of Europe: from castle to harbour?' in *Competing for global talent*, Kuptsch, C. and Fong, P.E. (eds.) (Geneva: ILS/ILO).
- Kuznetsov, Y. (2006) *Diaspora networks and the international migration of skills: how countries can draw on their talent abroad* (Washington D.C.: The World Bank).
- Levitt, P. (1999) 'Social remittances: a local-level, migration-driven form of cultural diffusion' *International Migration Review*, 132(32), 26-49.
- Levitt, P. and Glick Schiller, N. (2004) 'Conceptualizing simultaneity: a transnational social field perspective on society' *International Migration Review*, 38(3), 12-39.
- Levitt, P. and Lamba-Nieves, D. (2011) 'Social remittances revisited', *Journal of Ethnic and Migration Studies*, 31(1), 1-22.
- Lucas, R. E. (1988) 'On the mechanics of economic development' *Journal of Monetary Economics*, 22, 3-42.
- Luchilo, L. (2011) 'Introduction' in Luchilo, L. (ed.) *Beyond brain drain. Mobility, migration and diaspora of skilled Argentineans* (Buenos Aires: Eudeba) [In Spanish].
- Meyer, J-B. (2001) 'Network approach versus brain drain: lessons from the diaspora', *International Migration*, 39(5) (Oxford: Blackwell).
- Meyer, J-B. (2010) 'Preface' in Tejada, G. and Bolay, J-C. (eds.) *Scientific diasporas as development partners: skilled migrants from Colombia, India and South Africa in Switzerland. Empirical evidence and policy responses* (Bern: Peter Lang).
- MOIA (2012) *Annual report 2011-12*, (New Delhi: MOIA).
- Mukherjee, S. and Chanda, R. (2012) 'Indian student mobility to selected European countries: An overview', Working Paper 365, (Bangalore: IIM).
- OECD (2013). *Education at a glance 2013, OECD indicators* (Paris: OECD).
- Paasche, Erlend (2016) 'Return to corruptistan? Distinguishing between the aspiration and ability to socially remit among Iraqi Kurdish returnees from Europe' in this volume.
- Saxenian, A-L. (2005) 'From brain drain to brain circulation: transnational communities and regional upgrading in India and China', *Studies in Comparative International Development*, 40(2), 35-61.
- Saxenian, A-L. (2006) *The new Argonauts. Regional advantage in a global economy* (Cambridge: HUP).
- Siddiqui, Z. and Tejada, G. (2014) 'Development and highly skilled migrants: Perspectives from the Indian diaspora and returnees', *International Development Policy*, 6(1).
- Tejada, G. (2012) 'Mobility, knowledge and cooperation: Scientific diasporas as agents of development', *Migration and Development* 10(18), 59-92.
- Tejada, G., Bhattacharya, U., Khadria, B. and Kuptsch, Ch. (Eds.) (2014a). *Indian skilled migration and development: To Europe and back* (New Delhi: Springer).
- Tejada, G., Herçog, M., Kuptsch, Ch. and Bolay, J-C. (2014b) 'The link with a home country: A comparative analysis of host country environments for diaspora engagement' in Sahoo, S. and Pattanaik, B. (eds.) *Global diasporas and development: Socio-economic, cultural, and policy perspectives* (New Delhi: Springer).
- Thomas-Hope, E. (1999) 'Return migration to Jamaica and its development potential', *International Migration* 37(1), 183-207.
- Tremblay, K. (2005) 'Academic mobility and immigration', *Journal of Studies in International Education*, 9(3), 196-228.

UN-DESA and OECD (2013) World migration in figures. At: <http://www.oecd.org/els/mig/World-Migration-in-Figures.pdf>, date accessed 28 November 2015.

Vertovec, S. (2004) 'Migrant transnationalism and modes of transformation', *International Migration Review* 38(3), 970–1001.